Benns Church and Turner Drive Intersection Improvements

Engineer's Opinion of Probable Construction Costs

Planning Level OPC

11/16/2023

Bid Item	Description	Quantity	Units	Unit Price	Cost
	General Items				
1	MOBILIZATION	1	LS	$250,000	$250,000
2	CONSTRUCTION SURVEYING (CONSTR.)	1	LS	$40,000	$40,000
3	REGULAR EXCAVATION	5000	CY	$35	$175,000
4	BORROW EXCAVATION	2000	CY	$35	$70,000
	Pavement Items				
5	FLEXIBLE PAVE. PLANING 0"-2"	3800	SY	$10	$38,000
6	ASPHALT CONCRETE TY. SM-9.5A	1050	TON	$140	$147,000
7	ASPHALT CONCRETE TY. IM-19.0A	1150	TON	$120	$138,000
8	ASPHALT CONCRETE TY. BM-25.0A	1490	TON	$100	$149,000
9	AGGR. BASE MATL. TY. I NO. 21A OR 21B	2500	TON	$65	$162,500
	ROUNDABOUT APRON	190	SY	$200	$38,000
	Incidental Items				
10	STD. COMB. CURB CG-2	500	LF	$50	$25,000
11	STD. COMB. CURB & GUTTER CG-6	600	LF	$60	$36,000
12	MEDIAN ISLAND, MS-1	200	SY	$400	$80,000
13	CG-12 DETECTABLE WARNING SURFACE	10	SY	$500	$5,000
14	HYDRAULIC CEMENT CONC. SIDEWALK 4"	400	SY	$80	$32,000
	Drainage Items				
15	15" CONC. PIPE	500	LF	$200	$100,000
16	24" CONC. PIPE	500	LF	$250	$125,000
17	DROP INLET DI-1	10	EA	$4,500	$45,000
18	DROP INLET DI-3A	10	EA	$5,000	$50,000
19	MANHOLE, MH-1 OR 2	30	LF	$1,000	$30,000
20	MANHOLE FRAME AND COVER	5	EA	$1,000	$5,000
21	15" END SECTION	2	EA	$1,500	$3,000
22	24" END SECTION	6	EA	$2,000	$12,000
23	EROSION CONTROL STONE EC-1, CL I	16	TON	$200	$3,200
24	BMP	1	LS	$300,000	$300,000
	Signing and Marking Items				
25	SIGNING AND MARKING	1	LS	$100,000	$100,000
	Traffic Signal Items				
26	TRAFFIC SIGNAL	1	LS	$500,000	$500,000
27	REMOVE EXISTING TRAFFIC SIGNAL	1	LS	$10,000	$10,000
	Utility Relocations				
28	MISC UTILITY	1	LS	$100,000	$100,000
29	RELOCATE TOWN OF SMITHFIELD VAULT	1	LS	$100,000	$100,000
	Erosion & Sediment Control Items				
30	EROSION & SEDIMENT CONTROL	1	LS	$100,000	$100,000
31	ROADSIDE DEVELOPMENT	1	LS	$100,000	$100,000
	Demolition, Relocation, and Removal Items				
32	DEMOLITION OF PAVEMENT FLEXIBLE	1000	SY	$15	$15,000
33	SAW-CUT ASPH CONC (FULL DEPTH)	3000	LF	$7	$21,000
34	REMOVE EXIST TREES	1	LS	$20,000	$20,000
35	MISC DEMOLITION	1	LS	$100,000	$100,000
	Maintenance of Traffic				
36	MAINTENANCE OF TRAFFIC	1	LS	$400,000	$400,000
	Base Bid Estimate SUBTOTAL				**$ 3,624,700**
	Contingency (25%)				**$ 906,175**
	CEI (15%)				**$ 652,446**
	TOTAL CN Estimate				**$ 5,184,000**
	PE COST (20%)				**$ 906,175**
	RW COST				**$ -**
	VDOT OVERSIGHT(PE)				**$ 20,000**
	VDOT OVERSIGHT (CN)				**$ 80,000**
	TOTAL PROJECT COST				**$ 6,190,175**